Los Lunas High School students take top award in 28th Annual Supercomputing Challenge

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Jen Marie Phifer and Forest Good win top honors, teams from Los Alamos High School take second and third place awards

LOS ALAMOS, N.M., April 25, 2018—Jen Marie Phifer and Forest Good of Los Lunas High School won top honors on Tuesday at the 28th Annual New Mexico Supercomputing Challenge held at Los Alamos National Laboratory. Their project, “What’s Missing?” looks at a way to create a systematized method for finding missing pieces of data. The project has implications for the fields of accounting, logistics, and cybersecurity.

Second place went to Lillian Petersen of Los Alamos High School for her project, “Predicting Food Shortages in Africa from Satellite Imagery.” She created a tool to predict crop yields so that international aid organizations can be better prepared for humanitarian relief operations.

Elijah Pelofske of Los Alamos High School took third place with his project, “RSA-Based Primality Test.”

This year, 60 teams representing 26 schools from around the state submitted final reports. New Mexico Education Secretary Christopher Ruszkowski attended the awards ceremony and presented one of the awards to the finalists.

“The goal of the yearlong event is to teach student teams how to use powerful computers to analyze, model and solve real-world problems,” said David Kratzer of Los Alamos National Laboratory’s High Performance Computing division, and executive director of the Supercomputing Challenge. “Participating students improve their understanding of technology by developing skills in scientific inquiry, modeling, computing, communications and teamwork.”

In addition to presenting their projects at the Laboratory, students took part in tours, talks and demonstrations with Laboratory scientists. A complete list of all winning student teams is available at the New Mexico Supercomputing Challenge website, and all final student reports are also available online.

The Supercomputing Challenge is open to any New Mexico student in grades 6 through 12. More than 200 students and teachers from schools around the state spent the school year researching scientific problems, developing sophisticated computer programs and learning about computer science with mentors from the state's national laboratories and other organizations.

Scholarships worth more than $36,000 were awarded to students participating in the Challenge. Many other awards were also distributed ranging from random $100 gifts for finishing the academic marathon to team prizes for teamwork, research, programming prowess, and environmental impact.

About the Supercomputing Challenge

The New Mexico Supercomputing Challenge teaches computational thinking, computer modeling and 21st century skills such as research, teamwork, project management, written and oral communication to middle and high school students throughout the state. Any New Mexico student in grades 6 through 12, including home schooled students, is eligible to participate in the Challenge. Students conduct research projects on subjects of their own choosing. The Supercomputing Challenge is sponsored by Los Alamos National Laboratory, Los Alamos National Security, LLC, Sandia National Laboratories, and generous industry and educational partners across the state and country. A complete list of sponsors and supporters of the Challenge is on its website.